

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

List of Claims:

1-2 (Cancelled).

3. (Currently Amended) The fusion protein according to claim ~~58~~ 67, wherein said first polypeptide sequence is capable of associating with at least one MASP protein.

4. (Previously Presented) The fusion protein according to claim 3, wherein said first polypeptide sequence is capable of associating with a MASP protein selected from the group consisting of MASP-1, MASP-2 and MASP-3 or functional homologues or variants hereof.

5-14 (Cancelled).

15. (Currently Amended) The fusion protein according to claim ~~58~~ 27, wherein the first polypeptide sequence comprises amino acids 1-77 of human L-ficolin (SEQ ID NO: 125).

16-20 (Cancelled).

21. (Withdrawn - Currently Amended) The fusion protein according to claim ~~58~~ 67, wherein the second polypeptide sequence comprises the carbohydrate recognition domain (CRD domain) (AA 114 to 225 of SEQ ID NO:126) of MBL.

22. (Withdrawn - Currently Amended) The fusion protein according to claim 27, wherein the second polypeptide sequence comprises the neck region (AA 80 to 113 of SEQ ID NO:126) of MBL.

23 (Cancelled).

24. (Withdrawn - Currently Amended) The fusion protein according to claim ~~58~~ 67, wherein the second polypeptide sequence comprises the neck region (AA 80 to 113 of SEQ ID NO:126) and the CRD domain (AA 114 to 225 of SEQ ID NO:126) of MBL.

25 (Cancelled).

26. (Currently Amended) The fusion protein according to claim ~~58~~ 27, wherein the second polypeptide sequence comprises amino acids 80-228 of human MBL (SEQ ID NO:126).

27. (Withdrawn - Currently Amended) A fusion protein comprising (i) a first polypeptide sequence comprising the collagen-like domain (AA 29 to 67) of human L-ficolin (SEQ ID NO:125), or a substitution mutant sequence at least 95% identical to said domain, ~~wherein said first polypeptide sequence is capable of activating the lectin-complement pathway,~~ and (ii) a second polypeptide sequence comprising the CRD domain (AA 114 to 225) of human MBL (SEQ ID NO:126), or a substitution mutant sequence at least 95% identical to said CRD domain, wherein said second polypeptide sequence is capable of associating with one or more carbohydrates,

said fusion protein being capable of activating the lectin-complement pathway and associating with one or more carbohydrates,

wherein said fusion protein does not comprise human L-ficolin (SEQ ID NO:125) and does not comprise human MBL (SEQ ID NO:126).

28. (Cancelled)

29. (Withdrawn - Currently Amended) The fusion protein according to claim ~~58~~ 67, wherein the fusion protein comprises an amino acid sequence which is at least 95% identical to the sequence SEQ ID NO: 127.

30. (Currently Amended) The fusion protein according to claim ~~58~~ 67, wherein the fusion protein consists of the amino acid sequence as defined by the sequence SEQ ID NO: 127[[]]].

31. (Withdrawn - Currently Amended) An isolated nucleic acid comprising a nucleotide sequence encoding the fusion protein according to claim ~~58~~ 67.

32. (Withdrawn) A vector comprising the nucleic acid sequence according to claim 31.

33. (Withdrawn) A cell comprising the vector according to claim 32.

34-36 (Cancelled).

37. (Withdrawn - Currently Amended) A method of prevention and/or treatment of an infection in an individual in need thereof

comprising administering to said individual an effective amount of the fusion protein according to claim ~~58~~ 67.

38. (Cancelled)

39. (Withdrawn) The method according to claim 37, wherein the individual is a human being.

40. (Withdrawn) The method according to claim 37, wherein the individual is a human being suffering from an increased risk of acquiring an infection.

41. (Withdrawn) The method according to claim 37, wherein the individual is a human being with subnormal serum MBL level.

42. (Withdrawn) The method according to claim 37, wherein the individual is a human being with normal serum MBL level.

43-48 (Cancelled).

49. (Withdrawn - Currently Amended) A pharmaceutically acceptable composition for the treatment or prevention of a clinical condition in an individual in need thereof, comprising the fusion protein according to claim ~~58~~ 67, and a pharmaceutically acceptable carrier.

50-55. (Cancelled)

56. (Withdrawn - Currently Amended) The fusion protein of claim ~~58~~ 67, wherein the first polypeptide sequence comprises at least five instances of the motif X-G-X-X-G, which instances may be the same or different.

57-62. (Cancelled)

63. (Withdrawn - Currently Amended) The fusion protein of claim 67 wherein the first polypeptide sequence differs from the corresponding sequence of said human L-ficolin fragment, if at all, solely by one or more conservative substitutions, and said second polypeptide sequence differs from the corresponding sequence of said human MBL fragment, if at all, solely by one or more conservative substitutions, wherein a conservative substitution is the replacement of an amino acid with another amino acid of the same substitution group, the substitution groups being defined as

amino acids with polar side chains (Asp, Glu, Lys, Arg, His,

Asn, Gln, Ser, Thr, Tyr, and Cys),

amino acids with non-polar side chains (Gly, Ala, Val, Leu, Ile, Phe, Trp, Pro, and Met),

amino acids with aliphatic side chains (Gly, Ala, Val, Leu, Ile),

amino acids with cyclic side chains (Phe, Tyr, Trp, His, Pro),

amino acids with aromatic side chains (Phe, Tyr, Trp),

amino acids with acidic side chains (Asp, Glu),

amino acids with basic side chains (Lys, Arg, His),

amino acids with amide side chains (Asn, Gln),

amino acids with hydroxy side chains (Ser, Thr),

~~sulphor~~ amino acids with sulfur-containing side chains (Cys, Met), and

amino acids ~~being~~ which are monoamino-dicarboxylic acids or monoamino-monocarboxylic-monoamidocarboxylic acids (Asp, Glu, Asn, Gln).

64-66. (Cancelled)

67. (Withdrawn - Currently Amended) A fusion protein, comprising (i) a first polypeptide sequence which comprises at least amino acids 1-44 of human L-ficolin (SEQ ID NO:125), or which comprise a substitution mutant sequence at least 95% identical to amino acids 1-44 of human L-ficolin (SEQ ID NO:125) ~~thereto, wherein said first polypeptide sequence is capable of activating the lectin-complement pathway,~~ and (ii) a second polypeptide sequence which comprises at least amino acids 100-200 of human MBL (SEQ ID NO:126), or which comprises a substitution mutant sequence at least 95% identical to amino acids 100-200 of SEQ ID NO:126 ~~thereto,~~ wherein said second polypeptide sequence is capable of associating with one or more carbohydrates,

said fusion protein being capable of activating the lectin-complement pathway and associating with one or more carbohydrates,

wherein said fusion protein does not comprise human L-ficolin (SEQ ID NO:125) and does not comprise human MBL (SEQ ID

NO:126).

68. (Withdrawn) The fusion protein of claim 67, comprising (i) a first polypeptide sequence which comprises at least amino acids 1-44 of human L-ficolin (SEQ ID NO:125), and (ii) a second polypeptide sequence which comprises at least amino acids 100-200 of human MBL (SEQ ID NO:126).

69. (Cancelled)

70. (Currently Amended) The fusion protein of claim 27 comprising (i) a first polypeptide sequence comprising the collagen-like domain of human L-ficolin (AA 29 to 67 of SEQ ID NO:125), and (ii) a second polypeptide sequence comprising the CRD domain of human MBL (AA 114 to 225 of SEQ ID NO:126).

71-73. (Cancelled)

74. (Currently Amended) The fusion protein of claim 27 wherein the first polypeptide sequence differs from the corresponding sequence of said human L-ficolin fragment, if at all, solely by one or more conservative substitutions, and said second polypeptide sequence differs from the corresponding sequence of said human MBL fragment, if at all, solely by one or more conservative substitutions,

wherein a conservative substitution is the replacement of an amino acid with another amino acid of the same substitution, the substitution groups being defined as

amino acids with polar side chains (Asp, Glu, Lys, Arg, His, Asn, Gln, Ser, Thr, Tyr, and Cys),

amino acids with non-polar side chains (Gly, Ala, Val, Leu, Ile, Phe, Trp, Pro, and Met),

amino acids with aliphatic side chains (Gly, Ala, Val, Leu, Ile),

amino acids with cyclic side chains (Phe, Tyr, Trp, His, Pro),

amino acids with aromatic side chains (Phe, Tyr, Trp),

amino acids with acidic side chains (Asp, Glu),

amino acids with basic side chains (Lys, Arg, His),

amino acids with amide side chains (Asn, Gln),

amino acids with hydroxy side chains (Ser, Thr),
sulphur amino acids with sulfur-containing side chains (Cys, Met), and

amino acids being which are monoamino-dicarboxylic acids or monoamino-monocarboxylic-monoamidocarboxylic acids (Asp, Glu, Asn, Gln).

75-76. (Cancelled)

77. (Currently Amended) The fusion protein of claim ~~58~~ 67, wherein said first polypeptide is at least 95% identical to a fragment, comprising at least fifty consecutive amino acids, of human L-ficolin (SEQ ID NO:125).

78. (Previously Presented) The fusion protein of claim 77, wherein said first polypeptide is identical to a fragment, comprising at least fifty consecutive amino acids, of human L-ficolin (SEQ ID NO:125).

79. (Previously Presented) The fusion protein of claim 67 wherein said first polypeptide sequence comprises at least amino acids 1-54 of human L-ficolin, or a sequence at least 95% identical thereto.

80. (Previously Presented) The fusion protein of claim 67 wherein said first polypeptide sequence comprises at least amino acids 1-54 of human L-ficolin.

81. (Previously Presented) The fusion protein of claim 67 wherein said first polypeptide sequence comprises at least amino acids 1-57 of human L-ficolin, or a sequence at least 95% identical thereto.

82. (Previously Presented) The fusion protein of claim 67 wherein said first polypeptide sequence comprises at least amino acids 1-57 of human L-ficolin.

83. (Previously Presented) The fusion protein of claim 67 wherein said first polypeptide sequence comprises at least amino acids 1-103 of human L-ficolin, or a sequence at least 95% identical thereto.

84. (Previously Presented) The fusion protein of claim 67 wherein said first polypeptide sequence comprises at least amino

acids 1-103 of human L-ficolin.

85. (Previously Presented) The fusion protein of claim 67 wherein said first polypeptide sequence comprises at least amino acids 1-77 of human L-ficolin, or a sequence at least 95% identical thereto.

86. (Cancelled)

87. (Currently Amended) The fusion protein of claim ~~58~~ 67, which comprises

(a) (1) the a collagen-like domain (AA 29 to 67) , which is (1) selected from the group consisting of a human L-ficolin SEQ ID NO:125) or (2) a hybrid collagen-like domain, comprising at least AA 29 to 44 of human L-ficolin (SEQ ID NO:125) and at least AA 56 to 79 of a human MBL (SEQ ID NO:126) collagen-like domain, and a hybrid collagen-like domain comprising a first collagen-like domain fragment of the human L-ficolin collagen-like domain and a second collagen-like domain fragment of the human MBL collagen like domain, wherein, if mature human L-ficolin and mature human MBL are aligned, said first and second collagen-like domain fragments are substantially not aligned with each other, or (2 3) a sequence at least 95% identical to (a) (1) or (a) (2) above, and

~~(b) a carbohydrate recognition domain (CRD domain) which is the CRD domain of human MBL, or a sequence at least 95% identical thereto.~~

88-89. (Cancelled)

90. (Previously Presented) The fusion protein of claim 67 wherein the second polypeptide sequence comprises amino acids 80-228 of human MBL (SEQ ID NO:126), or a sequence at least 95% identical thereto.

91. (Previously Presented) The fusion protein of claim 67 wherein the second polypeptide sequence comprises amino acids 106-228 of human MBL (SEQ ID NO:126), or a sequence at least 95% identical thereto.

92. (Previously Presented) The fusion protein of claim 67 wherein the second polypeptide sequence comprises amino acids 56-

228 of human MBL (SEQ ID NO:126), or a sequence at least 95% identical thereto.

93. (Previously Presented) The fusion protein of claim 67 wherein the second polypeptide sequence comprises amino acids 44-228 of human MBL (SEQ ID NO:126), or a sequence at least 95% identical thereto.

94. (Previously Presented) The fusion protein of claim 67 wherein the second polypeptide sequence comprises amino acids 106-228 of human MBL (SEQ ID NO:126).

95. (Previously Presented) The fusion protein of claim 67 wherein the second polypeptide sequence comprises amino acids 56-228 of human MBL (SEQ ID NO:126).

96. (Previously Presented) The fusion protein of claim 67 wherein the second polypeptide sequence comprises amino acids 44-228 of human MBL (SEQ ID NO:126).

97. (Previously Presented) A method of prevention and/or treatment of an infection in an individual in need thereof comprising administering to said individual an effective amount of the fusion protein according to claim 27.

98. (Previously Presented) A method of prevention and/or treatment of an infection in an individual in need thereof comprising administering to said individual an effective amount of the fusion protein according to claim 67.

99. (Currently Amended) The fusion protein of claim 27, which does not comprise the fibrinogen-like domain (AA 106 to 252 of SEQ ID NO:125) of human L-ficolin.

100. (Currently Amended) The fusion protein of claim 27, which does not comprise the cysteine-rich region (AA 1 to 21 of SEQ ID NO:126) of human MBL.

101. (Currently Amended) The fusion protein of claim 100, which does not comprise the collagen-like domain (AA 22 to 79 of SEQ ID NO:126) of human MBL.

102. (Currently Amended) The fusion protein of claim ~~58~~ 67, which further comprises a signal peptide sequence.

103. (Previously Presented) The fusion protein of claim

102, wherein said signal peptide sequence is amino acids 1-25 of SEQ ID NO:118.

104. (Currently Amended) The fusion protein of claim ~~58~~ 67 wherein said first polypeptide sequence is at least 99% identical to said L-ficolin fragment and second polypeptide sequence is at least 99% identical to said MBL fragment.

105. (Currently Amended) The fusion protein of claim ~~58~~ 67 wherein said first polypeptide sequence differs from said L-ficolin fragment, if at all, solely by a single substitution, and wherein said second polypeptide sequence differs from said MBL fragment, if at all, solely by a single substitution.

106. (Currently Amended) The fusion protein of claim ~~58~~ 67 wherein said first polypeptide sequence differs from said L-ficolin fragment, if at all, solely by a single conservative substitution, and wherein said second polypeptide sequence differs from said MBL fragment, if at all, solely by a single conservative substitution.

107. (Currently Amended) The fusion protein of claim ~~58~~ 67 wherein said L-ficolin fragment comprises at least 44 consecutive amino acids of human L-ficolin and said MBL fragment comprises at least 185 amino acids of human MBL.

108. (Currently Amended) The fusion protein of claim ~~58~~ 67 wherein said L-ficolin fragment comprises at least 57 consecutive amino acids of human L-ficolin and said MBL fragment comprises at least 173 amino acids of human MBL.

109. (Currently Amended) The fusion protein of claim ~~58~~ 67 wherein said L-ficolin fragment comprises at least 103 consecutive amino acids of human L-ficolin and said MBL fragment comprises at least 123 amino acids of human MBL.

110. (Currently Amended) The fusion protein of claim ~~58~~ 67 wherein said L-ficolin fragment comprises at least 77 consecutive amino acids of human L-ficolin and said MBL fragment comprises at least 149 amino acids of human MBL.

111. (Currently Amended) The fusion protein of claim ~~58~~ 67 wherein said L-ficolin fragment comprises at least 44 consecutive

amino acids of human L-ficolin and said MBL fragment comprises at least 123 amino acids of human MBL.

112. (Cancelled)

113. (New) The fusion protein according to claim 67, which comprises (a)(1) the collagen like domain AA 29-67 of SEQ ID NO:125 of human L-ficolin (SEQ ID NO:125) and at least AAs 56-79 of human MBL (SEQ ID NO:126) or (3) a hybrid comprising amino acids 29-44 of human L-ficolin (SEQ ID NO:125) and amino acids 44-79 of human MBL (SEQ ID NO:126) or (4) a sequence at least 95% identical to (a)(1) (a)(2) or (a)(3) above.

114. (New) The fusion protein according to claim 87, wherein the fusion protein comprises the CRD domain (AA 114 to 225) of human MBL (SEQ ID NO:126).